

Appendix D. Protected Uses for Northern Colorado Plateau Parks in Utah, Wyoming, Arizona and Colorado

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The following tables summarize protected uses as identified by the states of Utah, Wyoming, Arizona, and Colorado for Northern Colorado Plateau Parks. Numeric standards for water quality are specific to these protected uses.

Table D-1. Protected uses designated for Northern Colorado Plateau Parks in Utah.

| UTAH PARK UNIT | WATERS IN PARK | REFERENCE TO STATE SEGMENT | Utah High Quality Cat. 2 ¹ | UTAH PROTECTED USES (See Table D-5 for Definitions of Use Codes) | | | | | | |
|------------------------|---|---|---------------------------------------|---|----|----|----|----|----|---|
| | | | | 1C | 2B | 3A | 3B | 3C | 3D | 4 |
| Hovenweep NM | See Table D-4 below | San Juan River | | | | | | | | |
| Bryce Canyon NP | East | Paria River | | | | | | | | |
| | West | East Fork Sevier River, Annabelle Diversion to headwaters and Tropic Res. | | | | | | | | |
| Zion NP | Kolob Area (Taylor Creek, Camp Creek) | Ash Creek above Ash Creek Res. | | | | | | | | |
| | North Fork Virgin River and tributaries. | North Fork Virgin River confluence w/ E. Fork to headwaters | | | | | | | | |
| | East Fork Virgin River | East Fork Virgin River confluence w/ N. Fork to headwaters | | | | | | | | |
| | Kolob Creek | Kolob Creek, confluence with N. Fork V. R. to headwaters | | | | | | | | |
| | Kolob Reservoir & Navajo Lake (both outside Park) | Kolob Reservoir and Navajo Lake | | | | | | | | |

Table D-1 continued.

| UTAH PARK UNIT | WATERS IN PARK | REFERENCE TO STATE SEGMENT | Utah High Quality Cat. 2 ¹ | UTAH PROTECTED USES (See Table D-5 for Definitions of Use Codes) | | | | | | |
|--------------------|--|---|---------------------------------------|---|----|----|----|----|----|---|
| | | | | 1C | 2B | 3A | 3B | 3C | 3D | 4 |
| Zion NP | North Creek, Coalpits Wash | Virgin River upstream of Quail Creek Diversion | | | | | | | | |
| | LaVerkin Creek | Virgin River below Quail Creek Diversion | | | | | | | | |
| Cedar Breaks NM | West Slope | Coal Creek and tributaries | | | | | | | | |
| | East Slope | Duck Creek and tributaries | | | | | | | | |
| Timpanogos Cave NM | All | American Fork River | | | | | | | | |
| Dinosaur NM | See Table D-4 below | | | | | | | | | |
| Natural Bridges NM | All (White Canyon) | Lake Powell and all tributaries | | | | | | | | |
| Golden Spike NHS | Blue Creek | Blue Creek from Great Salt Lake to Blue Cr. Res. | | | | | | | | |
| Capitol Reef NP | Fremont R. Downstream of CARE (Harnet Draw, Sandy & Oak Cr. in park) | Fremont River and tributaries from the confluence with Muddy Cr. To CARE | | | | | | | | |
| | Fremont River in CARE and upstream | Fremont River and tributaries through CARE to Headwaters | | | | | | | | |
| | Pleasant Creek inside CARE | Pleasant Creek and tributaries, from confluence with Fremont River to E. boundary of CARE | | | | | | | | |
| | Pleasant Cr. upstream of CARE (outside of Park) | Pleasant Cr. and tributaries from east boundary of Capitol Reef to headwaters | | | | | | | | |
| | Halls Creek (Bitter Cr. Divide South in park) | All tributaries to Lake Powell except as listed separately | | | | | | | | |
| | Southwestern Margin of park | Escalante River and tributaries, from Lake Powell to confluence with Boulder Creek | | | | | | | | |
| Arches NP | All | Colorado R. and tributaries from Lake Powell to state line | | | | | | | | |

Table D-1 continued.

| UTAH PARK UNIT | WATERS IN PARK | REFERENCE TO STATE SEGMENT | Utah High Quality Cat. 2 ¹ | UTAH PROTECTED USES (See Table D-5 for Definitions of Use Codes) | | | | | | |
|----------------|---|---|---------------------------------------|---|----|----|----|----|----|---|
| | | | | 1C | 2B | 3A | 3B | 3C | 3D | 4 |
| Canyonlands NP | Most of Park | Colorado R. and tributaries from Lake Powel l to state line, and Green River and tributaries from confluence with Colorado R. to State Line | | | | | | | | |
| | Immediate vicinity of Indian Cr. confluence and southeastern-most margin of park. | Indian Creek and tributaries from confluence with Colorado R. to Newspaper Rock State Park | | | | | | | | |
| | Southwestern-most margin of park | All Tributaries to Lake Powell except as listed separately | | | | | | | | |

¹ High Quality category 2 designation in Utah does not carry with it specific numeric criteria at this time.

Table D-2. Protected uses designated for Northern Colorado Plateau Parks in Wyoming.

| Wyoming | | | | |
|------------------------|--|---|--------------|--|
| PARK | WATERS IN PARK | REFERENCE TO STATE SEGMENT | CLASS | PROTECTED USES |
| Fossil Butte NM | Chicken Creek Watershed and North East Slopes draining to North Fork Twin Cr. | Chicken Creek, tributary to Twin Creek and North Fork of Twin Creek in Lincoln County | 3B | Scenic Value, Industry, Agriculture, Wildlife, Recreation, Other Aquatic Life (NOT Protected are: Drinking Water, Game Fish, Non-Game Fish, and Fish Consumption) |
| | Western Slopes draining to Rock Creek. Southern Slopes draining to Twin Creek, including Smallpox Cr. | Rock Creek, tributary to Twin Creek Twin Creek, tributary to Bear River | 2AB | All (Drinking Water, Game Fish, Non-Game Fish, and Fish Consumption, Other Aquatic Life, Recreation, Wildlife, Agriculture, Industry, and Scenic) |

Table D-3. Protected uses designated for Northern Colorado Plateau Parks in Arizona.

| Arizona | | | |
|-----------------------|-----------------------|-----------------------------------|--|
| PARK | WATERS IN PARK | REFERENCE TO STATE SEGMENT | Protected Uses |
| Pipe Spring NM | All | Kanab Creek | Aquatic and Wildlife warm water, Full-body Contact, Domestic Water Source, Fish Consumption, Agricultural Irrigation |

Table D-4. Protected uses designated for Northern Colorado Plateau Parks in Colorado (including portions of Dinosaur and Hovenweep National Monuments in Utah).

| Segment Description ¹ | Water Body Identification Code (305b Water Body Identification Code) ² | Miles (In Park) | Shoreline Miles ³ | Acres (In Park) | State-Designated Uses Applied to this Segment (See Table D-5 for Definitions of Use Codes) | | | | | | | | | |
|--|--|-----------------|------------------------------|-----------------|---|-------|-------|-------|-----|-----|------|----|----|----|
| | | | | | Colorado | | | | | | Utah | | | |
| | | | | | AG | ALCW1 | ALWW1 | ALWW2 | DWS | RPC | RSC | 1C | 2B | 3A |
| Dinosaur National Monument | | | | | | | | | | | | | | |
| CO Region 11, LY/G Basin, Segment 2 Mainstem of the Yampa River from a point immediately above the confluence with Lay Creek to the confluence with the Green River. | COLCLY02 (COLCLY02_8100) | 48.23 | | 2.92 | | | | | | | | | | |
| CO Region 11, LY/G Basin, Segment 14 All Tributaries to the Yamps River, including all wetlands, lakes and reservoirs from a point immediately below the confluence with Lay Creek to a point immediately below the confluence with the Little Snake River. | COLCLY14 (COLCLY14_8100) | 230.98 | | | | | | | | | | | | |
| CO Region 11, LY/G Basin, Segment 19 Mainstem of the Green River within Colorado (Moffatt County) | COLCLY19 (COLCLY19_7800) | 25.32 | | 48.65 | | | | | | | | | | |
| CO Region 11, LY/G Basin, Segment 20 All tributaries to the Green River in Colorado, including all wetlands, lakes and reservoirs, except for the specific listings in segments 21 and 22; all tributaries of the Yampa River from a point immediately below the confluence with the Green River, except for the specific listings in segments 15 through 18. | COLCLY20 (COLCLY20_7800) | 74.28 | | | | | | | | | | | | |
| CO Region 11, White R. Basin, Segment 22 All Tributaries to the White River, including all wetlands, lakes and reservoirs, from a point immediately above the confluence with Douglas Creek to the Colorado/Utah border, except for the specific listing in Segment 23. | COLCWH22 (COLCWH22_8500) | 0.99 | | | | | | | | | | | | |

Table D-4 continued.

[illegible]

Table D-4 continued.

[illegible]

Table D-4 continued.

[illegible]

| Segment Description ¹ | Water Body Identification Code (305b Water Body Identification Code) ² | Miles (In Park) | Shoreline Miles ³ | Acres (In Park) | State-Designated Uses Applied to this Segment (See Table D-5 for Definitions of Use Codes) | | | | | | | | | |
|---|--|-----------------|------------------------------|-----------------|---|-------|-------|-------|-----|-----|------|----|----|----|
| | | | | | Colorado | | | | | | Utah | | | |
| | | | | | AG | ALCW1 | ALWW1 | ALWW2 | DWS | RPC | RSC | 1C | 2B | 3A |
| Hovenweep National Monument | | | | | | | | | | | | | | |
| CO Region 9, Basin -La Plata R., Mancos R. McElmo Cr., and San Juan R. in Montezuma County and Delores County, Segment 7a: Mainstem of McElmo Creek from the source to the Colorado/Utah Border. Mainstem of Yellow Jacket Creek, including all tributaries, wetlands, lakes and reservoirs from the source to the confluence with McElmo Creek. | | | | | | | | | | | | | | |
| Utah Units – all San Juan River and its tributaries | | | | | | | | | | | | | | |

¹ Segment Descriptions are taken verbatim from the State of Colorado Stream Classifications and Water Quality Standards except that references to exceptions that do not pertain to the park have been deleted. (e.g. where the description says “except for the specific listings for segments 3a to 6,” this text has been deleted if segments 3a to 6 are not located in or near the park.)

² The Water Body Identification Code is a state-assigned identifier for each reach. The Water Body Identification Codes used in 303d reports may include more than one WBID, or may include only a part of one WBID.

³ Shoreline Miles applies to adjacent lakes/ponds, seas/oceans, swamps/marshes, reservoirs or estuaries.

Table D-5. Definitions of Colorado and Utah designated protected uses.

| State-Designated Use Codes | State-Designated Use | Definition |
|----------------------------|----------------------------------|---|
| Colorado | | |
| AG | Agriculture | These surface waters are suitable or intended to become suitable for irrigation of crops usually grown in Colorado and which are not hazardous as drinking water for livestock. |
| ALCW1 | Aquatic Life Cold Water-Class 1 | These are waters that (1) currently are capable of sustaining a wide variety of cold water biota, including sensitive species, or (2) could sustain such biota but for correctable water quality conditions. Waters shall be considered capable of sustaining such biota where physical habitat, water flows or levels, and water quality conditions result in no substantial impairment of abundance and diversity of species. |
| ALWW1 | Aquatic Life Warm Water-Class 1 | These are waters that (1) currently are capable of sustaining a wide variety of warm water biota, including sensitive species, or (2) could sustain such biota but for correctable water quality conditions. Waters shall be considered capable of sustaining such biota where physical habitat, water flows or levels, and water quality conditions result in no substantial impairment of abundance and diversity of species. |
| ALWW2 | Aquatic Life Warm Water-Class 2 | These waters are not capable of sustaining a wide variety of warm water biota, including sensitive species, due to physical habitat, water flows or levels, or uncorrectable water quality conditions that result in substantial impairment of the abundance and diversity of species. |
| DWS | Water Supply | These surface waters are suitable or intended to become suitable for potable water supplies. After receiving standard treatment (defined as coagulation, flocculation, sedimentation, filtration and disinfection with chlorine or its equivalent) these waters will meet Colorado drinking water regulations and any revisions, amendments or supplements thereto. |
| RPC | Recreation 1 - Primary Contact | These surface waters are suitable or intended to become suitable for recreational uses in or on the water when the ingestion of small quantities of water is likely to occur. Such waters include but are not limited to those used for swimming, rafting, kayaking and water-skiing. |
| RSC | Recreation 2 - Secondary Contact | These surface waters are suitable or intended to become suitable for recreational uses on or about the water which are not included in the primary contact subcategory, including but not limited to fishing and other streamside or lakeside recreation. |

Table D-5 continued.

| State-Designated Use Code | State-Designated Use | Definition |
|---------------------------|--------------------------------|--|
| Utah | | |
| 1C | Drinking Water Supply | Protected for domestic purposes with prior treatment by processes as required by the Utah Department of Health. |
| 2A | Primary Contact (Recreation) | Protected for primary contact recreation such as swimming. |
| 2B | Secondary Contact (Recreation) | Protected for secondary contact recreation such as boating, wading, or similar uses. |
| 3A | Cold Water Game Fish | Protected for cold water species of game fish and other cold water aquatic life, including the necessary aquatic organisms in their food chain. |
| 3B | Warm Water Game Fish | Protected for warm water species of game fish and other cold water aquatic life, including the necessary aquatic organisms in their food chain. |
| 3C | Nongame Fish | Protected for nongame fish and other aquatic life, including the necessary aquatic organisms in their food chain. |
| 3D | Waterfowl | Protected for waterfowl, shore birds and other water-oriented wildlife not included in Classes 3A, 3B, or 3C, including the necessary aquatic organisms in their food chain. |
| 3E | Severely Habitat Limited | Severely habitat limited waters. Narrative standards will be applied to protect these waters for aquatic wildlife. |
| 4 | Agriculture | Protected for agricultural uses including crop irrigation and stock watering. |
| 5 | Great Salt Lake | Protected for primary and secondary contact recreation, aquatic wildlife, and mineral extraction. |

Sources: Adapted from National Park Service 2003a, 2003b, 2003c, and 2003d, which used Environmental Protection Agency WQSDB (Version 3), and State of Utah, 1997 as primary sources.

Sources

Environmental Protection Agency 2003. National Water Quality Standards Database. Fourth release. EPA, Washington D.C.
Available at <http://www.epa.gov/wqsdatabase/>.

National Park Service. 2003a. Clean Water Act Water Quality Designated Uses and Impairments; Black Canyon of the Gunnison National Park. National Park Service, Ft. Collins, Colorado, Technical Report NPS/NRWRD/NRTR-2003/303, 13 p.

National Park Service. 2003b. Clean Water Act Water Quality Designated Uses and Impairments; Colorado National Monument. National Park Service, Ft. Collins, Colorado, Technical Report NPS/NRWRD/NRTR-2003/304, 13 p.

National Park Service. 2003c. Clean Water Act Water Quality Designated Uses and Impairments; Curecanti National Recreation Area. National Park Service, Ft. Collins, Colorado, Technical Report NPS/NRWRD/NRTR-2003/305, 17 p.

National Park Service. 2003d. Clean Water Act Water Quality Designated Uses and Impairments; Dinosaur National Monument. National Park Service, Ft. Collins, Colorado, Technical Report NPS/NRWRD/NRTR-2003/306, 21 p.

State of Arizona. 1996. Arizona Administrative Code, title 18. Environmental Quality, Chapter 11. Department of Environmental Quality Water Quality Standards. Appendix B. List of Surface Waters and Designated Uses. State of Arizona, Phoenix.

State of Utah. 1997. Standards of Quality for Waters of the State, R317-2, Utah Administrative Code. Utah Dept of Environmental Quality, Div. of Water Quality. Revised December 19, 1997. State of Utah, Salt Lake City.

State of Wyoming. 2000. Wyoming Surface Water Quality Standards, Water Quality Rules and Regulations, Table B, Surface Water Classification List. State of Wyoming, Cheyenne.